

Title: WIRELESS COMMUNICATION APPARATUS

Inventors: Susumu Kashiwase

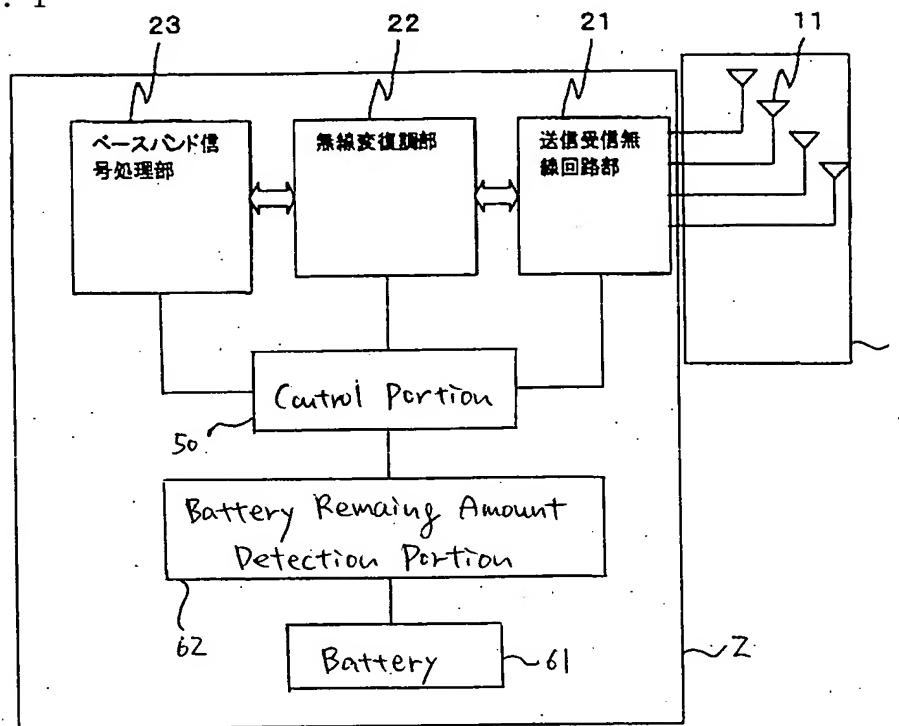
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Fig. 1



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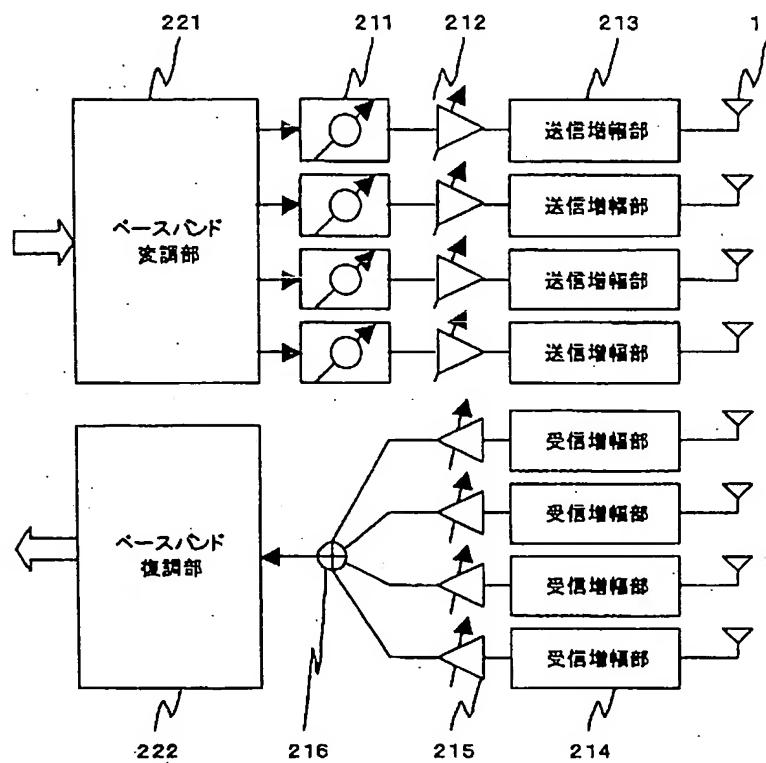
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Fig. 2



213 TRANSMISSION AMPLIFIER

214 RECEPTION AMPLIFIER

221 BASEBAND MODULATOR

222 BASEBAND DEMODULATOR

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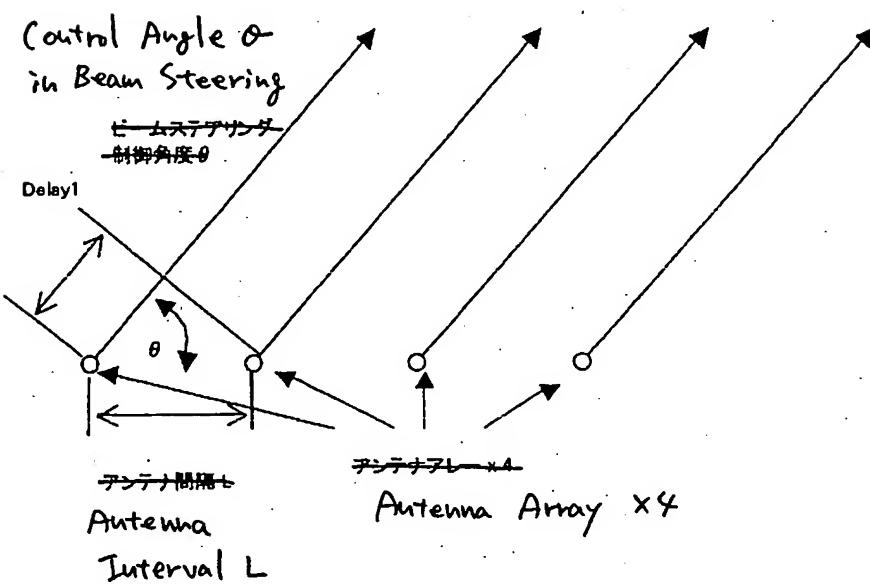
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Fig. 3



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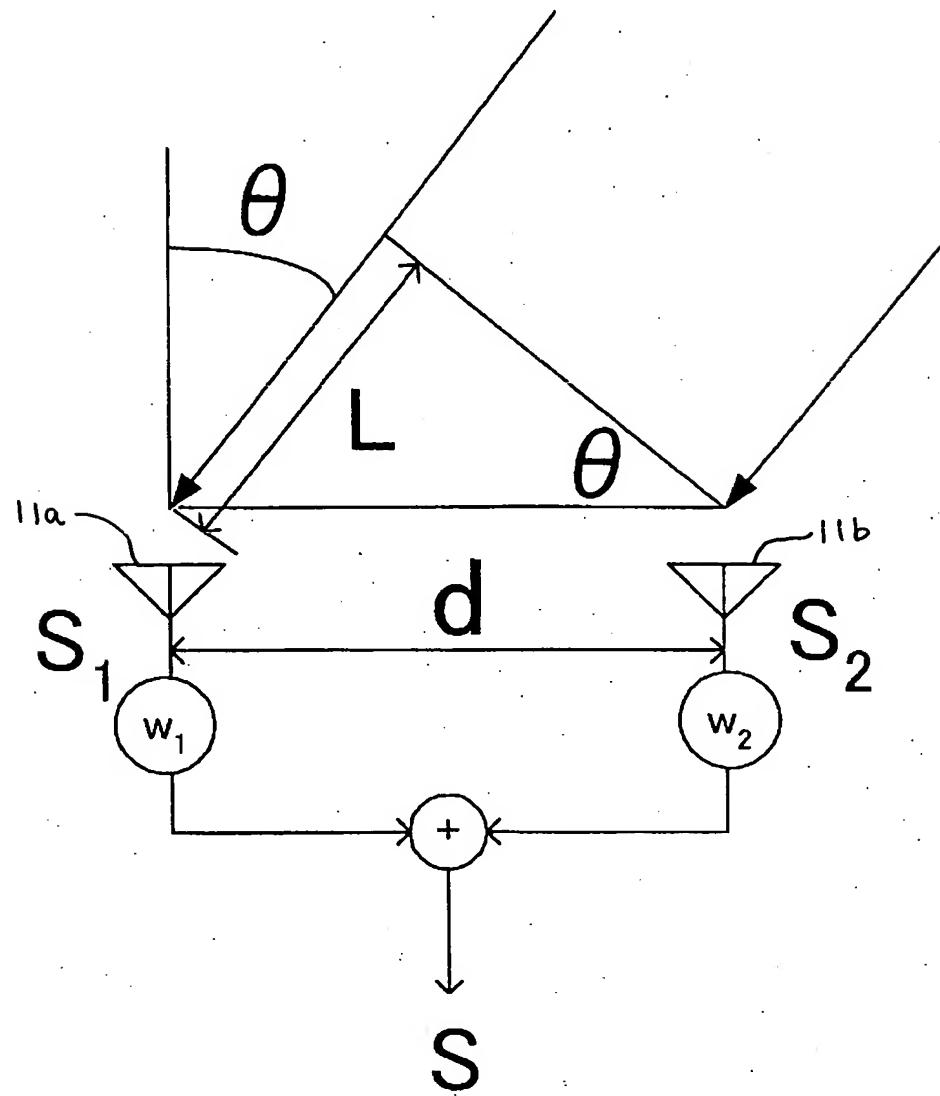
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Fig. 4



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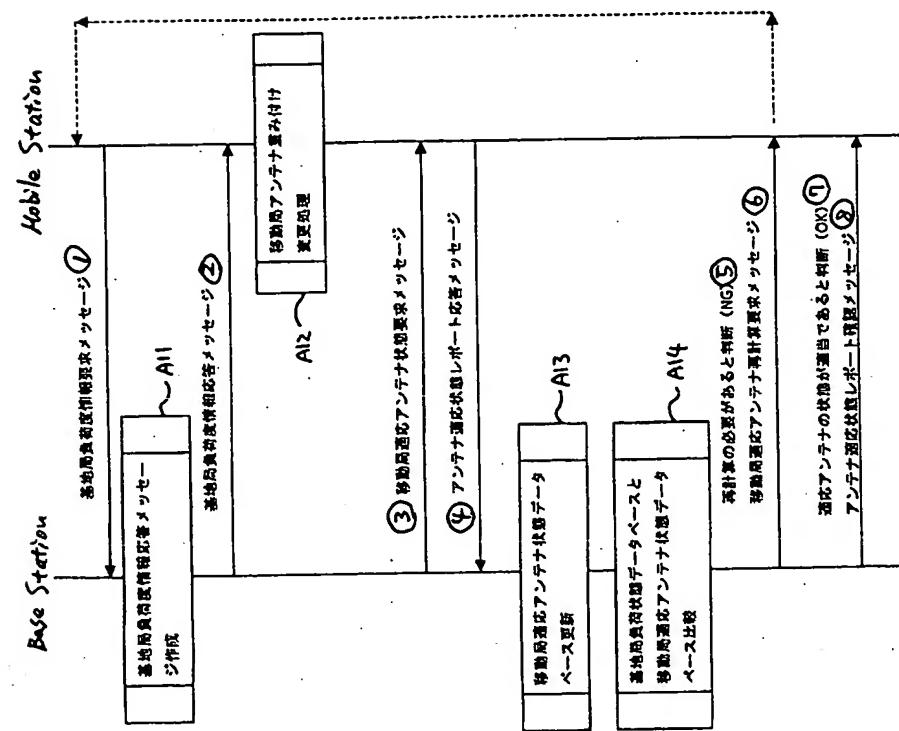


Fig. 5

A11: Create Base Station Load Factor Information Response Message

A12: Processing For Changing Weighting Of Antenna Of Mobile Station

A13: Update Mobile Station Adaptive Antenna State Database

A14: Compare Base Station Load Condition Database With Mobile Station Adaptive Antenna State Database

① Base Station Load Factor Information Request Message

② Base Station Load Factor Information Response Message

③ Mobile Station Adaptive Antenna State Request Message

④ Antenna Adaptive State Report Response Message

⑤ Decide That Recalculation Is Necessary (NG)

⑥ Mobile Station Adaptive Antenna Recalculation Request Message

⑦ Decide That State Of Adaptive Antenna Is Proper (OK)

⑧ Antenna Adaptive State Report Confirmation Message

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Fig. 6
Operating Frequency Band

運用周波数帯	Urban	Suburbs	Vehicular	Handoff
JAPAN 800MHz Band	(WA, WB)	(WA, WB)	(WA, WB)	(WA, WB)
USA 800MHz Band	(WA, WB)	(WA, WB)	(WA, WB)	(WA, WB)
USA 1900MHz Band	(WA, WB)	(WA, WB)	(WA, WB)	(WA, WB)
Korea 1900MHz	(WA, WB)	(WA, WB)	(WA, WB)	(WA, WB)

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Fig. 7
Start
S111: Base Station Load Factor Is Larger Than Or Equal To Specified Value?

S112: Decrease Weighting Of Beam Steering

S113: Load Of Adjacent Base Station Is Large?

S114: Increase Weighting Of Beam Steering

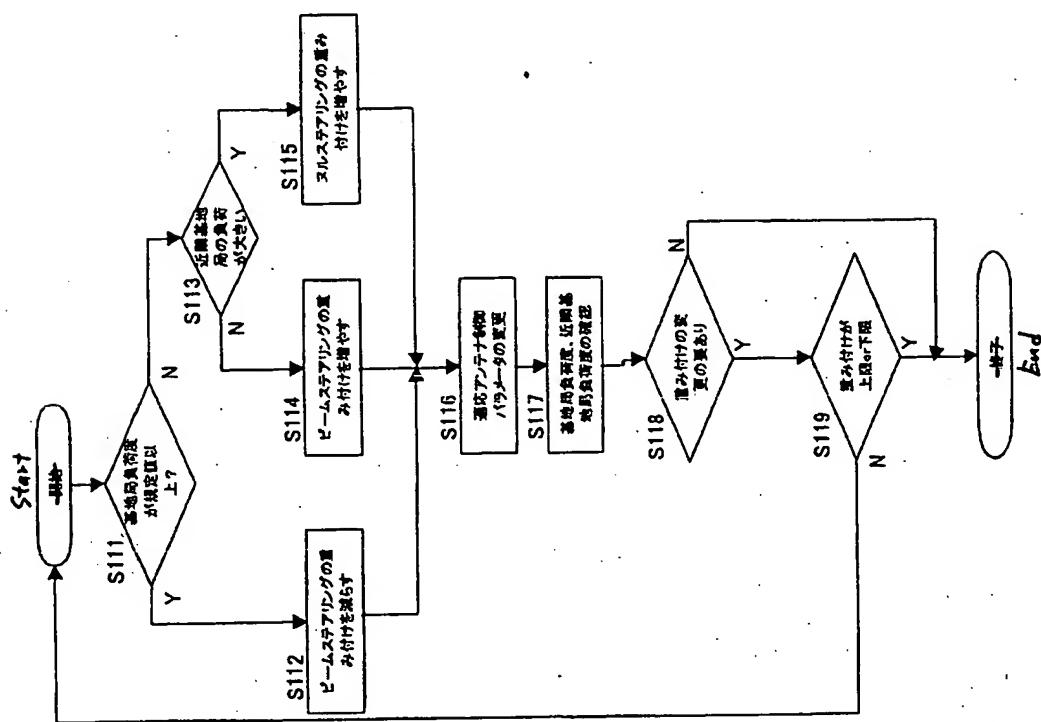
S115: Increase Weighting Of Null Steering

S116: Change In Control Parameter Of Adaptive Antenna

S117: Confirmation Of Base Station Load Factor And Adjacent Base Station Load Factor

S118: It Is Necessary To Change Weighting?

S119: Weighting Is Upper Limit Or Lower Limit?



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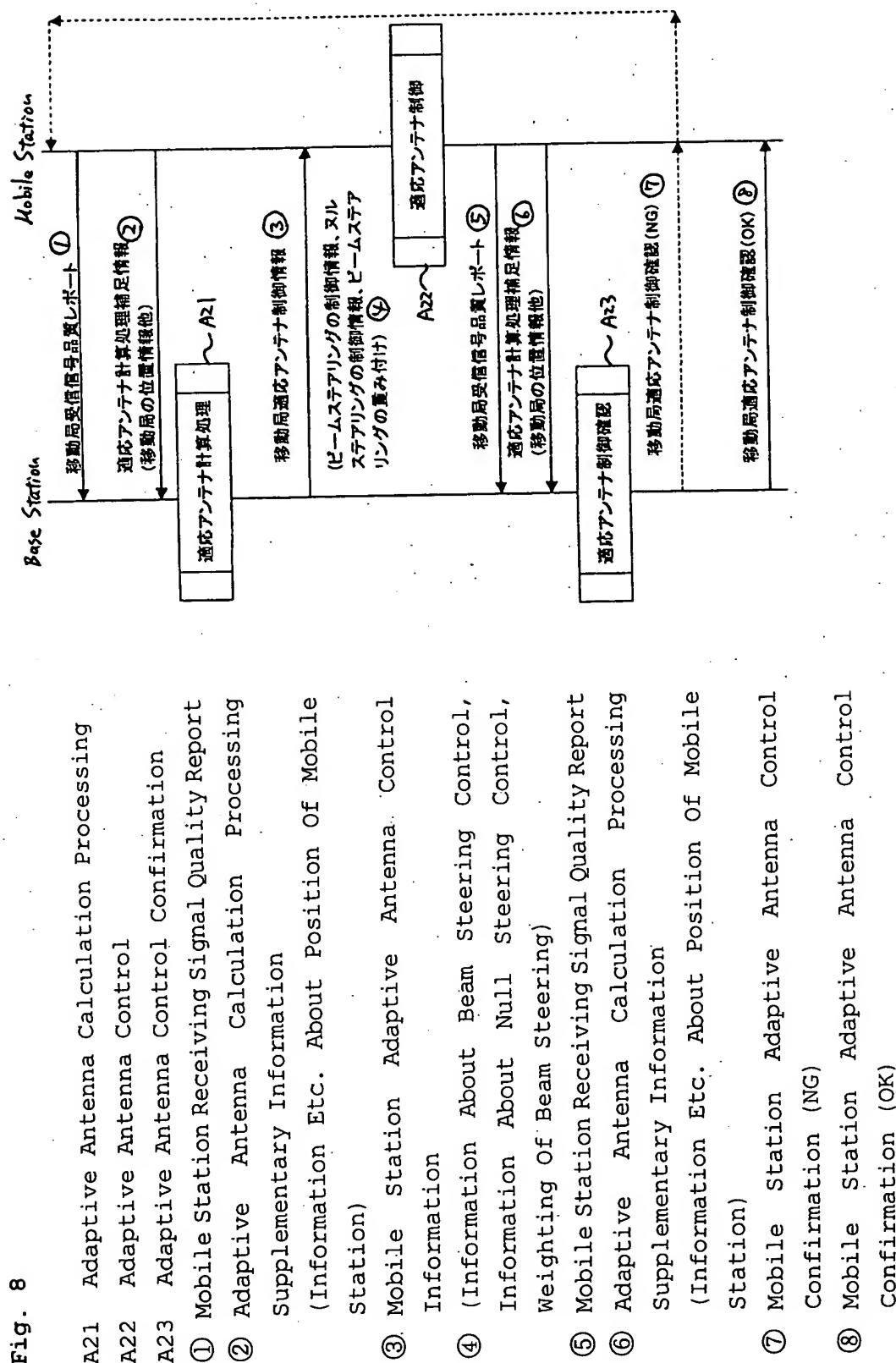
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Fig. 9 Event Occurrence

